

## ABSTRACT

A process (10) for producing synthesis gas includes, in a gasification stage (12), gasifying a carbonaceous feedstock to provide a raw synthesis gas which includes at least  $\text{H}_2$ , CO and  $\text{CH}_4$  and, in a partial oxidation stage (14), subjecting the raw synthesis gas to partial oxidation in the presence of oxygen to provide an upgraded synthesis gas which includes less  $\text{CH}_4$  and more  $\text{H}_2$  and CO than the raw synthesis gas. The invention extends to a process for producing a synthesis gas derived product.